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- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ALPHA, OMEGA-DICARBOXIMIDE DERIVATIVES AS USEFUL URO-SELECTIVE A1A ADRENOCEPTOR BLOCKERS

(57) Abstract: Novel α,ω -dicarboximide derivatives which selectively inhibit binding to the α_1A adrenergic receptor, a receptor which has been shown to be important in the treatment of benign prostatic hyperplasia. The compounds of the present invention are potentially useful in the treatment of benign prostatic hyperplasia.

WO 03/084928 A1

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB02/01113

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07D 209/48, 401/06, 403/06, 491/08; A61K 31/4035, 31/496.

US CL : 544/360,372,373; 548/465, 513; 514/253.12, 254.08,414, 421.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 544/360,372,373; 548/465, 513; 514/253.12, 254.08,414, 421.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CAS ONLINE STRUCTURE SEARCH

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,E	WO 02/44151 A1 (RANBAXY LABORATORIES LIMITED) 06 June 2002 (06.06.2002), see entire document especially pages 1-17.	1-12
X	WO 00/05206 (RANBAXY LABORATORIES LIMITED) 03 February 2000 (03.02.2000), see entire document especially pages 5-12 and 15-26.	1-12
X	US 4,479,954 (HIROSE et al.) 30 October 1984 (30.10.1984), see entire document especially column 24, lines 1-10 and columns 41-43.	1-2, 5-6, 13
Y		3, 14-15
Y	US 4,745,117 (ISHIZUMI et al.) 17 May 1988 (17.05.1988), see columns 10-11.	13-15
Y	US 4,871,739 (BALDWIN et al.) 03 October 1989 (03.10.1989), see column 1, lines 24-37.	3

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

31 March 2003 (31.03.2003)

Date of mailing of the international search report

18 APR 2003

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB02/01113

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claim Nos.: 1,3-36 (all in part)
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
Please See Continuation Sheet
3. ☐ Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

PCT/IB02/01113

Continuation of Item 4 of the first sheet:

There are typos in the title. It should apparently read as: ALPHA, OMEGA-DICARBOXIMIDE DERIVATIVES AS USEFUL URO-SELECTIVE A1A ADRENOCEPTOR BLOCKERS.

Continuation of Box I Reason 2:

The claims relate to an extremely large number of permutations based on the scope of variables as generically set forth in the claims which are not all adequately supported in the description within the meaning of Article 6. The claims have been searched based on the classification and/or structural makeup of species listed in claim 2.